FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: TONOPAH PUBLIC UTILITIES

PO BOX 151
TONOPAH, NV 89049

Permit Number: NS0000026

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: TONOPAH PUBLIC UTILITIES WASTEWATER TREATMENT PLANT, NYE CEMETERY ROAD, TONOPAH, NV 89049
LATITUDE: 38.0725, LONGITUDE: -117.266667
TOWNSHIP: 3N, RANGE: 42E, SECTION: 33

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Influent Structure		38.0725	-117.266389	GROUNDWATER
002	EFFLUENT	External Outfall		38.0725	-117.266389	GROUNDWATER
003	PRETREATMENT POND	Surface Disposal Site		38.072124	-117.266032	GROUNDWATER
004	FACULTATIVE TREATMENT POND 1	Surface Disposal Site		38.071588	-117.266385	GROUNDWATER
005	FACULTATIVE TREATMENT POND 2	Surface Disposal Site		38.071663	-117.267454	GROUNDWATER
006	FACULTATIVE TREATMENT POND 3	Surface Disposal Site		38.072302	-117.267243	GROUNDWATER
007	STANDPIPE/NON-POTABLE WATER TRUCK FILL POINT	External Outfall		38.074938	-117.249569	GROUNDWATER

Permit History/Description of Proposed Action
The Permittee, Tonopah Public Utilities, has applied for the renewal of Permit NS0000026 for the Tonopah Public Utilities' Wastewater Treatment Plant (TPU WWTP), located approximately 2-miles northwest of the community of Tonopah, on Cemetery Road, within Esmeralda County, Nevada. The TPU WWTP uses an Advanced Integrated Wastewater Pond System (AIPS) to treat domestic and light commercial wastewater, along with any portable toilet waste received from a manhole connected to the TPU sewer system into which waste trucks are permitted to discharge.

This permit was first issued on June 17, 1987. The most recent permit was issued on July 1, 2016, and expired on June 30, 2021; the permit has been administratively continued since.

Facility Overview
The TPU WWTP treats mainly domestic sewage produced from the town population and commercial establishments. In 2007, TPU replaced two Imhoff Tanks (septic tanks) with an AIPS. The AIPS is a four-cell (treatment pond) arrangement consisting of an anaerobic pretreatment pond and three aerated facultative ponds, each lined with 60-mil high density polyethylene (HDPE) liners. Disinfected pond effluent

is discharged to one of the eight RIBs constructed. The plant is designed to treat up to a 30-day average of 0.60 million gallons per day (Mgal/d) of domestic wastewater, with a maximum daily flow rate of 1.0 Mgal/d.

Additional improvements to the TPU WWTP were completed in 2013, with the construction of a filtering pump station, a chlorine contact basin, a 100-micron mesh sieve for algae reduction (suspended solids), 7,750 feet of 6- and 8-inch PVC piping, a 4,500-gallon holding tank, and a standpipe/non-potable water truck fill point, to allow for reuse of the treated effluent. With the chlorine added to the treated wastewater, the TPU WWTF can meet Category D bacteriological quality in accordance with Nevada Administrative Code (NAC) 445A.276. The treated effluent is used for dust control, construction related activities, and other Category D approved uses.

Domestic sewage from the town of Tonopah travels through the sewer system and into the TPU WWTP's headworks which includes a gravity receiving vault, grit trap, auger screen, manually cleaned trash rack (bypass flow channel) and ultrasonic flume channel. TPU WWTP additionally allows for portable toilet waste to be discharged to a manhole connected to the sewer system, to be mixed in with the incoming domestic sewage, and also be treated at the plant.

After the effluent flows through the flume channel, it is diverted into the Pretreatment Pond, with the option to divert directly to Facultative Pond No. 1 if flows exceed the maximum day flow rate. The Pretreatment Pond is a deep, oxygen-free pond where microbes break down organic matter in wastewater without oxygen, producing methane, carbon dioxide, and other byproducts through a three-stage process involving enzymes, acid-forming bacteria, and methane-forming bacteria. This pond acts as a initial pre-treatment stage, effectively reducing the organic load and settling solids before the wastewater moves to other treatment steps. The Pretreatment Pond is 0.4 acres in surface area, and is a 15-ft. deep primary pond, with a 6-foot deep sludge sump (sludge trap) for enhanced carbonaceous biochemical oxygen demand, 5-day (CBOD5) removal. Inlet feed into the sump generates a filtering, sludge blanket as the influent flows upward to the overflow vault to reduce downstream CBOD5 demand in Facultative Ponds No. 1-3.

In the aerated Facultative Ponds, the biodegradation processes are partially aerobic and anaerobic. The Facultative Ponds are described as partial mix ponds. Organic matter in the wastewater is stabilized by a combination of solids settling, anaerobic degradation of the settled solids, and the aerobic/anaerobic degradation of soluble CBOD5 in the middle and upper portions of the ponds. Facultative Ponds No. 1-3- are aspirator aerated, are 1.1 acre each in surface area, and 12-feet deep.

Next, the treated wastewater from Facultative Pond No. 3 can either be diverted to the 1) Filtration Building, which is located at the headworks, for filtration and disinfection, then piped to the truck fill stand for construction water or applied irrigation use of the (now) Category D bacteriological quality (per NAC 445A.276) secondary treated wastewater; or, to the 2) Filtration Building, with no disinfection being done, just filtration, then out to the RIBs for percolation into the ground; or, 3) be discharged directly to the RIBs from Facultative Pond No. 3.

When the treated wastewater goes to the Filtration Building, filtration is done using a cylindrical fine screen (100 microns), to remove TSS. After the wastewater flows through the mesh sieve, the reuse effluent is disinfected with 0.8% sodium hypochlorite solution that is dosed to the effluent stream by a pump injector mechanism. The filtered and disinfected reuse effluent passes from the Filtration Plant to the Truck Fill Stand. The secondary effluent may also be filtered (but not disinfected) prior to discharge to the RIBs.

If the TPU WWTF opts to discharge directly after the treatment arrangement (from Facultative Pond No. 3), the treated wastewater is conveyed to one of the eight RIBs, which are intermittently loaded and allowed to rest between loading cycles, for final treatment. The RIBs provide additional CBOD5, total suspended solids (TSS), and pathogen removal, via soil infiltration, allowing the treated effluent to achieve secondary treatment standards based on the requirements set forth by the federal Environmental Protection Agency (EPA) and adopted by the state of Nevada.

There Division having received a Reclaimed Water Management Plan (RWMP) for the applied use from Outfall 007. The site’s Reclaimed Water Management Plan (RWMP) was last reviewed and approved by the

Division on August 18, 2016. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control requires RWMPs be updated every two (2) permit cycles which equates to every ten (10) years; therefore, an updated RWMP shall be due on August 18, 2026.

Outfall Summary
Outfall 001 – This internal outfall is for the influent entering into the flow control structure at the TPU's WWTP.

Outfall 002 – This external outfall is for the facility's treated wastewater being discharged into the RIBs.

Outfall 003 – This outfall is for the measurement of freeboard at the Pretreatment Pond.

Outfall 004 – This outfall is for the measurement of freeboard at Facultative Pond No. 1.

Outfall 005 – This outfall is for the measurement of freeboard at Faculative Pond No. 2.

Outfall 006 – This outfall is for the measurement of freeboard at Facultative Pond No. 3.

Outfall 007 – This external outfall is for the standpipe/non-potable water truck fill point that receives Category D bacteriological quality (per NAC 445A.276), secondary treated wastewater for construction water or future irrigation use.

Facility Upgrades since last issued permit
There have been no facility upgrades since the last issued permit.

Solids Handling
Ponds are sampled minimally once a year to determine sludge depths and sludge removed to drying beds located at the Tonopah Airport (as permitted under NS0010018). The solids are then taken to the Tonopah Landfill for disposal.

The four drying beds located at the TPU WWTP are no longer used for solids handling.

Effluent Management and Reuse
Treated effluent is either disposed of via discharge to one of eight RIBs for infiltration into the groundwater or the TPU WWTP has the option to use the filtered Category D bacteriological quality, secondary treated wastewater for irrigation or construction water as needed from the Standpipe/Non-Potable Water Truck Fill Point (Outfall 007).

Design Flow (and basis) and Measurement & Current Capacity
The TPU WWTP was designed with an average day flow rate of 0.60 million gallons per day (Mgal/d) and a peak flow (daily maximum) flow rate of 1.0 Mgal/d.

The long-term average reported flow rate for Outfall 001 (influent) was 0.27 Mgal/d, with an average daily maximum reported flow rate of 0.66 Mgal/d. There were no reported exceedances.

The long-term average discharge (effluent) flow rate for Outfall 002 was 0.16 million gallons per day (MGD). The daily maximum discharge flow rate was based on a monitor and report (M & R) 30-day daily average and daily maximum.

Pretreatment Program
The TPU WWTP does not meet the federal Environmental Protection Agency’s (EPA’s) guidelines requiring them to have a pretreatment program.

Operations & Maintenance (O&M) Manual status
The TPU WWTP’s Operation & Maintenance Manual (O&M Manual) was last reviewed and approved by the

Division on August 18, 2016. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every two (2) permit cycles which equate to every ten (10) years, with an updated O&M Manual due on August 18, 2026.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from July 2020 to June 2025, was reviewed as part of this permit renewal process.

Under Outfall 002, the TPU WWTP discharges secondary treated wastewater to the RIBs.

The TPU WWTP discharges secondary treated and disinfected reclaimed water treated to Outfall 007 (standpipe/non-potable water truck fill point). For wastewater discharged at this outfall, the TPU WWTP is treating to a Category D bacteriological quality per NAC 445.276. Therefore, the reclaimed water should meet, at a minimum, a daily maximum fecal coliform of 400 colony forming units (CFU) / 100 mL and a 30-day geometric mean of 200 CFU / 100 mL. The reported long-term average for the daily maximum fecal coliform was 8.60 CFU / 100 mL.

The following averages were taken from July 2020 to June 2025 reporting period:

Notes:
Ft. = Feet
Mg/L = Milligrams per liter
Mgal/d = Million Gallons per Day
S.U. = Standard Units
CBOD5 = Carbonaceous Biochemical Oxygen Demand, 5-Day
N = Nitrogen
TDS = Total Dissolved Solids
TSS = Total Suspended Solids

Outfall 001 (Influent):
Flow Rate: 0.66 Mgal/d
CBOD5: 231 mg/L
TSS: 235 mg/L

Outfall 002 (Effluent):
CBOD5: 39.01 mg/L
TSS: 51.85 mg/L
Nitrogen: 47.39 mg/L

Outfall 003 (Pretreatment Pond):
Freeboard: 3.78 Ft.

Outfall 004 (Facultative Pond No. 1):
Freeboard: 3.90 Ft.

Outfall 005 (Facultative Pond No. 2):
Freeboard: 3.90 Ft.

Outfall 006 (Facultative Pond No. 3):
Freeboard: 3.90 Ft.

Outfall 007 (Standpipe/Non-Potable Water Truck Fill Point):
Flow Rate: No Discharge
CBOD5: 16.41 mg/L
Fecal Coliform: 8.60 Colony Forming Units per 100mL

pH: 7.98 S.U.
TSS: 5.0 mg/L

Removal Rates:
The average removal rate for CBOD5 was approximately 83% while the average removal rate for TSS was 80%.

There was an high concentration of total nitrogen reported based on the lagoon system not being designed to nitrify/denitrify the wastewater, does not have an effluent denitrificaton requirement, and also operates in a colder climate where nitrogen bacteria cannot be inhibited naturally by water temperatures.

Pollutants of Concern
Pollutants of concern are any pollutants or parameters that are believed to be present in the discharge and could affect or alter the physical, chemical, or biological condition of the receiving water. Common pollutants of concern for the treated effluent are Fecal Coliform, Nitrogen and pH, along with potential inorganic chemicals and metals (Profile 1 contaminants).

Receiving Water
The receiving water is groundwater of the State. The groundwater in the area is reportedly more than 200 feet below ground surface and flows west. Based on the depth to groundwater, the permitted discharges are not expected to negatively impact the groundwater.

Compliance History
The TPU WWTP was in compliance during the July 2020 through June 2025 reporting period.

Proposed Effluent Limitations
The discharge shall be limited and monitored by the Permittee as specified below:

WWTP Discharge Limitations Table for Sample Location 001 (Influent) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001[1]	Continuous	METER
Flow rate	30 Day Average	<= 0.499 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001[1]	Continuous	METER
BOD, carbonaceous, 05 day, 20 C	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001[1]	Monthly	DISCRT
BOD, carbonaceous, 05 day, 20 C	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001[1]	Monthly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001[1]	Monthly	DISCRT
Solids, total suspended	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001[1]	Monthly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Parshall Flume

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Monthly	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Monthly	METER
BOD, carbonaceous, 05 day, 20 C	Daily Maximum		<= 40 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
BOD, carbonaceous, 05 day, 20 C	30 Day Average		<= 25 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Nitrogen, total	Daily Maximum		M&R Milliliters per Liter (mL/L)	Effluent Gross	002	Monthly	COMPOS
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Monthly	COMPOS
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	002	Monthly	COMPOS
Solids, total suspended	Daily Maximum		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Solids, total suspended	30 Day Average		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
BOD, carb-5 day, 20 deg C, percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD
Solids, suspended percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. Sampling to be done at Flow Control System 5.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aluminum, total (as Al)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Antimony, total (as Sb)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Arsenic, total (as As)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Barium, total (as Ba)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Calcium, total (as Ca)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, total (as Cr)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Iron, total (as Fe)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Magnesium, total (as Mg)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, total (as Mn)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Potassium, total (as K)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver, total (as Ag) [1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Sodium, total (as Na)[1]	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Thallium, total (as Tl)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Analysis shall be to the dissolved fraction.

Re-use Discharge Limitations Table for Sample Location 007 (Standpipe/Non-Potable Water Truck Fill Point) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	007[1]	Daily	CALCTD
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	007[1]	Daily	CALCTD
Coliform, fecal general	Daily Maximum		<= 400 Colony Forming Units per 100ml T (CFU/100mL)	Effluent Gross	007[1]	Monthly	DISCRT
Coliform, fecal general	30 Day Geometric Mean		<= 200 Colony Forming Units per 100ml T (CFU/100mL)	Effluent Gross	007	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. Sampling port at the Water Truck Fill Station.

Ponds / Rapid Infiltration Basins for Sample Location 003 (Pretreatment Pond) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Freeboard	Minimum		>= 2 Feet (ft)	See Footnote[1]	003	Weekly	VISUAL

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Pretreatment Pond staff gauge.

Ponds / Rapid Infiltration Basins for Sample Location 004 (Facultative Treatment Pond 1) To Be Reported Monthly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Freeboard	Minimum		>= 3 Feet (ft)	See Footnote[1]	004	Weekly	VISUAL

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Facultative Treatment Pond 1 staff gauge.

Ponds / Rapid Infiltration Basins for Sample Location 005 (Facultative Treatment Pond 2) To Be Reported Monthly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Freeboard	Minimum		>= 3 Feet (ft)	See Footnote[1]	005	Weekly	VISUAL

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Facultative Treatment Pond 2 staff gauge.

Ponds / Rapid Infiltration Basins for Sample Location 006 (Facultative Treatment Pond 3) To Be Reported Monthly

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Freeboard	Minimum		>= 3 Feet (ft)	See Footnote[1]	006	Weekly	VISUAL

Notes (Ponds / Rapid Infiltration Basins):

1. Freeboard shall be monitored at the Facultative Treatment Pond 3 staff gauge.

Summary of Changes From Previous Permit

Under Outfall 002, WWTP Discharge Limitation Table for Sample Location 002 (Effluent) To Be Reported Monthly, the following parameters were either added, changed, or deleted:

ADDED – Flow Rate, with a “Daily Maximum” Base, a “M&R Million Gallons per Day (Mgal/d)” Discharge Limitation, a “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Meter” sample type. This reporting requirement was added to measure the flow rate of the effluent being discharged directly into the RIBs.

ADDED – Flow Rate, with a “30 Day Average” Base, a “M&R Million Gallons per Day (Mgal/d)” Discharge Limitation, a “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Meter” sample type. This reporting requirement was added to measure the flow rate of the effluent being discharged directly into the RIBs.

ADDED – Nitrogen, total, with a “Daily Maximum” Base, a “M&R Milligrams per Liter” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Compos” sample type.

ADDED – pH, maximum, with a “Daily Maximum” Base, a “<=9.0 Standard Units (S.U.)” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Compos” sample type.

ADDED – pH, minimum, with a “Daily Minimum” Base, a “>=6.0 Standard Units (S.U.)” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Compos” sample type.

ADDED – BOD, carb 5-day, 20 deg C, percent removal, with a “Monthly Average Minimum” Base, an “>=85 Percent (%)” Concentration Unit, a “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

ADDED – Solids, suspended percent removal, with a “Monthly Average Minimum” Base, an “>=85 Percent (%)” Concentration Unit, a “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Monthly” Measurement Frequency, and a “Calctd” Sample Type.

CHANGED – BOD, carbonaceous, 05-day, 20 C, with a “Daily Maximum” Base, changed FROM a “<=45 Milligrams per Liter (mg/L)” Concentration TO a “40 Milligrams per Liter (mg/L)” Concentration. This change was made to adhere to federal secondary treatment standards for publicly owned treatment works (POTWs), as adopted by the state of Nevada.

CHANGED – BOD, carbonaceous, 05-day, 20 C, with a “30 Day Average” Base, changed FROM a “<=45 Milligrams per Liter (mg/L)” Concentration TO a “25 Milligrams per Liter (mg/L)” Concentration. This change

was made to adhere to federal secondary treatment standards for POTWs, as adopted by the state of Nevada.

CHANGED – Solids, total suspended (TSS), with a “Daily Maximum” Base Concentration changed FROM a “<=90 Milligrams per Liter (mg/L)” Concentration TO a “<=135 Milligrams per Liter (mg/L)” Concentration. This change was made to adhere to federal allowable TSS limits for treated wastewater, as approved for the state of Nevada.

DELETED – Outfall 002, WWTP Discharge Limitation Table for Sample Location 002 (Effluent) To Be Reported Quarterly.

DELETED - Nitrogen, total, with a “Daily Maximum” Base, a “M&R Milligrams per Liter” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Quarterly” Measurement Frequency, and a “Compos” sample type. This parameter was moved to the Monthly reporting period for this outfall, with the same applicable discharge limitations and monitoring requirements.

DELETED - Nitrogen, total, with a “30 Day Average” Base, a “M&R Milligrams per Liter” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, a “Quarterly” Measurement Frequency, and a “Compos” sample type. This was removed due to it not being part of the Division’s standard reporting requirements.

Under Outfall 002, WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During the Permit Term was added along with the following parameters.

ADDED – Profile 1 Pollutants, with an “Daily Maximum” Base, an “M&R Milligrams per Liter (mg/L)” Concentration, an “Effluent Gross” Monitoring Location, a “002” Sample Location, and a “Discrt” sample type.

Under Outfall 007, RU Re-Use Limitations Table for Sample Location 007 (Water Fill Truck Stand) To Be Reported Monthly the following parameters were either added or changed:

ADDED – Coliform, fecal general, with a “30 Day Average” Base, a “<=200 Colony Forming Units per 100ml T (CFU/100mL)” Concentration, a “Effluent Gross” Monitoring Location, a “007” Sample Location, and a “Discrt” Sample Type. This parameter was inserted as both the “30 Day Average” and the “Daily Maximum” are described under NAC 445A.276 Reuse Categories: Requirements for bacteriological quality of reclaimed water.

DELETED – BOD, carbonaceous, 05-day, 20 C, with a “Daily Maximum” Base.

DELETED – BOD, carbonaceous, 05-day, 20 C, with a “30 Day Average” Base.

DELETED – Solids, total suspended (TSS), with a “Daily Maximum” Base.

DELETED – Solids, total suspended (TSS), with a “30 Day Average” Base.

DELETED – pH, maximum, with a “Maximum” Base.

DELETED – pH, minimum, with a “Minimum”

Technology Based Effluent Limitations

Technology based effluent limitations (TBELs) are required as promulgated by the United States (U.S.) EPA for POTWs. The following limits are based on secondary treatment standards as allowed by the Code of Federal Regulation (CFR) Title 40, Section 133, and which has been adopted by the State of Nevada.

U.S. EPA published federal secondary treatment standards at 40 CFR 133 based on an evaluation of

performance data for POTWs practicing a combination of physical and biological treatment. Performance is measured by monitoring biodegradable organics and suspended solids in the effluent, and the ability to maintain pH. Federal secondary treatment standards are defined under 40 CFR 133 for maximum CBOD5 as a 30-day average of 25 mg/L and a 7-day average of 40 mg/L. In addition to describing the minimum levels of effluent quality attainable by secondary treatment, 40 CFR 133.102 states that the 30-day average percent removal of BOD5 and TSS shall not be less than 85%. The Division has adopted these standards for groundwater dischargers and has applied the same 7-day average threshold as daily maximum effluent limits for CBOD5.

The following performance standards for POTWs with secondary treatment standards have been included in the permit:

BOD5: 30-day average limit: <= 30 mg/L; Daily maximum limit: <= 45 mg/L.

pH: Daily Maximum: <= 9.0 Standard Units

pH: Daily Minimum >= 6.0 Standard Units

Federal regulations also allow states to adjust the maximum allowable TSS concentration for waste stabilization ponds, upwards from those specified in the secondary treatment standards, to conform to TSS concentrations achievable with waste stabilization ponds. The approved alternate TSS requirement in the state of Nevada is 90 mg/L as a 30-day average, implemented as an average monthly limit. Furthermore, the daily maximum TSS limit was calculated using a factor of 1.5 times the average monthly limitation (90 mg/L X 1.5 = 135 mg/L).

The following performance standards for POTWs with secondary treatment standards have also been included in the permit:

CBOD5 percent removal standard, based on a minimum monthly average, must meet a minimum limit is 85%.

TSS percent removal standard, based on a minimum monthly average, must meet minimum limit is 85%.

Limits Based on Facility's Design Criteria Review:

30-day average permitted influent flow rate is limited to <= 0.499 Mgal/d.

Daily maximum permitted influent flow rate is limited to a M&R Mgal/d.

Water Quality Based Effluent Limitations
Water quality-based effluent limitations are not applicable to this permit.

Proposed Water Quality Based Effluent Limits (monthly/weekly/daily)
Proposed water quality-based effluent limitations are not applicable to this permit.

Basis for Effluent Limitations
There are currently no specific water quality standards that have been formally adopted by the State for groundwater. However, the Division has the discretion to implement effluent limitations outside water quality standards per NAC 445A.243, which states, "In establishing an effluent limitation to carry out the policy of this State set forth in Nevada Revised Statutes (NRS) 445A.305, consideration must be given to, but is not limited by, the following: …(2) the need for standards that specify by chemical, physical, biological or other characteristics the extent to which pollution by various substances will not be tolerated." The constituents listed in Profile I have been vetted by the Division and have been included in groundwater discharge permits for many years as a means of regulating groundwater quality. Per NRS 445A.490, “No permit may be issued which authorizes any discharge or injection of fluids through a well into any waters of

the State: (3) which would result in the degradation of existing or potential underground sources of drinking water."

Federal EPA water quality standards include a reference value range for pH of 6.0 S.U. through 9.0 S.U., which the Division has applied to protect underground sources of drinking water. Raw domestic wastewater inherently has variable pH. Additionally, some wastewater treatment processes can increase or decrease wastewater pH, which, if not properly controlled, could cause exceedances outside of the reference value range. Therefore, the proposed permit establishes effluent limitations for pH of 6.0 S.U. as a daily minimum and 9.0 S.U. as a daily maximum. Monthly effluent monitoring for pH is included to ensure protection of underground sources of drinking water. A monthly sampling frequency for pH is sufficient for determining compliance with effluent limitations for pH and is consistent with the Division's policy.

Influent and Effluent Monitoring Requirements:

Monthly influent and effluent monitoring requirements for CBOD5 and TSS are included to assess treatment performance of the ponds. A monthly sampling frequency for CBOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations and is consistent with the Division's policy.

Other Required Water Quality Monitoring:

The requirement to monitor the effluent for Profile 1 pollutants once per permit term is included to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving water. Although cyanide and uranium are not expected to be present in the effluent, the proposed permit requires the Permittee sample these constituents once during the permit term as they are included in the Profile 1 list and they have not been sampled before.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit, with the exception of the daily maximum limit for TSS. This limit was changed to adhere to established federal regulations, that have been approved for the state of Nevada and applicable to POTWs utilizing stabilization ponds for wastewater treatment. The approved alternate TSS requirement is 90 mg/L as a 30-day average, with the daily maximum TSS limit calculated by using a factor of 1.5 times the average monthly limitation (90 mg/L X 1.5 = 135 mg/L).

Antidegradation
The Division has developed an antidegradation regulation that is applied on a statewide basis, and which meets the statutory requirements of Nevada's water pollution control law found at NRS 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at 40 CFR § 131.12. The objective of the Division's antidegradation regulation is to prevent degradation of Nevada's surface waters and maintain the unique attributes and special characteristics and water quality associated with high-quality waters.

As this permit is for discharges to groundwater, and not surface water, the new antidegradation rule is not applicable. There are currently no specific water quality standards that have been formally adopted by the State for groundwater; however, data reviewed during the renewal process does not indicate the potential for degradation of the groundwater from the treated effluent discharged within the compliance limits of the proposed permit.

Special Conditions
See the Special Approvals/Conditions Table in the permit.

SA – Special Approvals / Conditions Table

Item #	Description

Item #	Description
1	The O&M Manual shall include a description of the O&M procedures and Best Management Practices used for the discharge of portable toilet fluids into the manhole connected to the TPU's sewer system.
2	The RWMP shall also address the operation and maintenance procedures for any equipment associated with the standpipe/non-potable water truck fill point.

Discharges From Future Outfalls/ Planned Facility Changes
There are no planned future outfalls or facility changes at this time.

Corrective Action Sites
There are no active Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the TPU WWTP.

Wellhead Protection Program
The outfalls are not located within a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two copies (one hard copy and one electronic copy) of an updated Operations and Maintenance (O&M) Manual for review and approval by the Division. The O&M Manual shall follow the Division's guidance document, WTS-2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant, and be prepared and wet stamped prepared by a licensed, qualified Nevada engineer (P.E.).	8/18/2026
2	The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP) to the Division for review and approval. The RWMP shall follow the Division’s guidance document WTS1B: General Design Criteria for Preparing a Reclaimed Water Management Plan and be prepared and wet-stamped by a licensed, qualified Nevada engineer (P.E).	8/18/2026

Deliverable Schedule:

DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Discharge Monitoring Report	Quarterly	4/28/2026
2	Annual Report	Annually	1/28/2026

Procedures for Public Comment:

The Notice of the Division's intent to issue a permit authorizing the facility to discharge to groundwater of the State of Nevada subject to the conditions contained within the permit, is being mailed to interested persons on our mailing list and will be posted on our website at https://ndep.nv.gov/posts. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **12/8/2025,** a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted. Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determined to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to issue/re-issue the proposed 5-year permit.

Prepared by: **Melissa Hanson**
Date: **10/29/2025**
Title: **Staff II Engineer**

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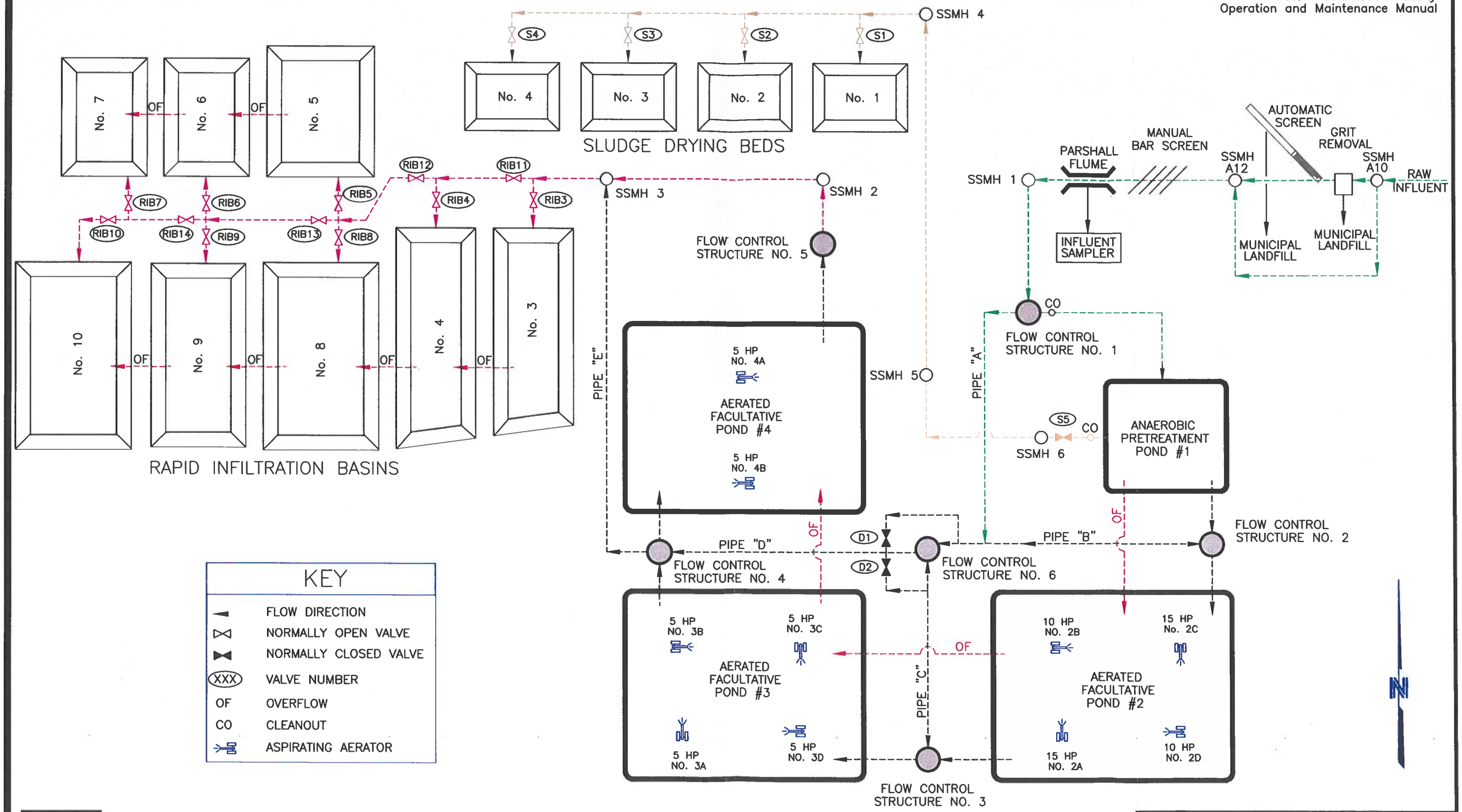

KEY

◄	FLOW DIRECTION
⋈	NORMALLY OPEN VALVE
⋈	NORMALLY CLOSED VALVE
(XXX)	VALVE NUMBER
OF	OVERFLOW
CO	CLEANOUT
	ASPIRATING AERATOR

SHAW
ENGINEERING

FIGURE 3.1
FLOW SCHEMATIC